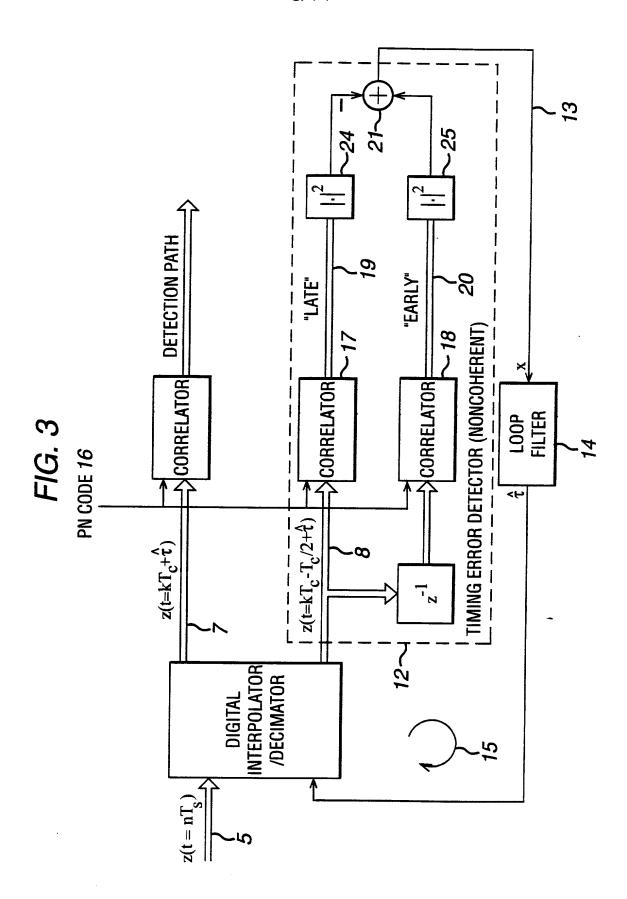
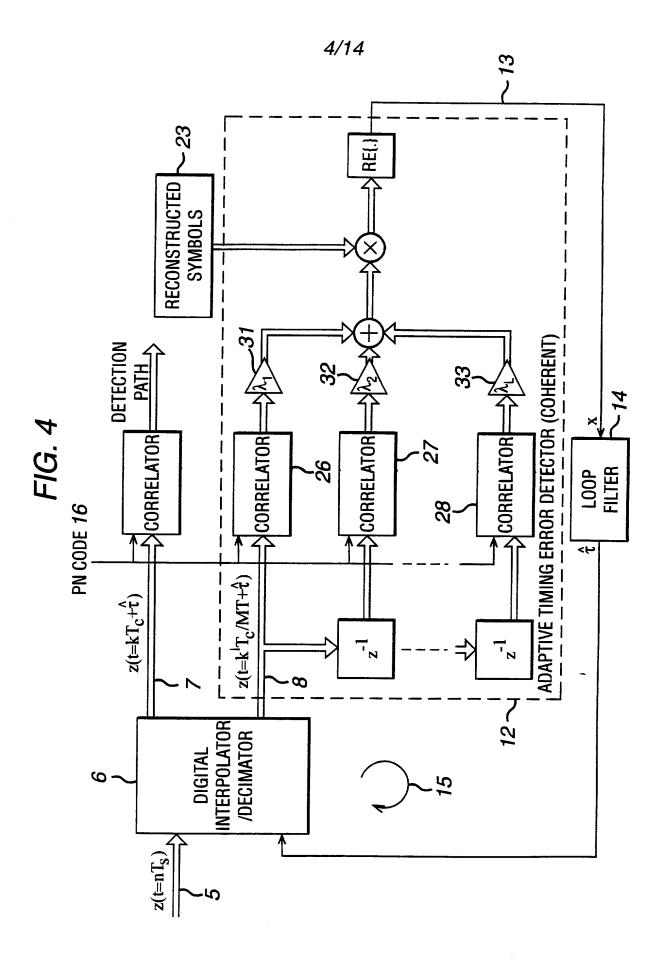


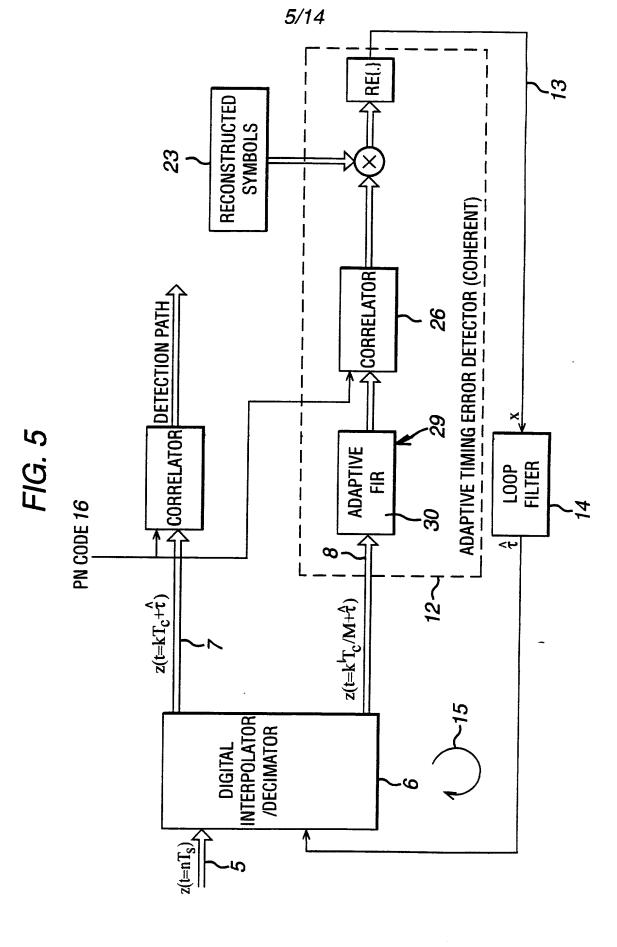
(



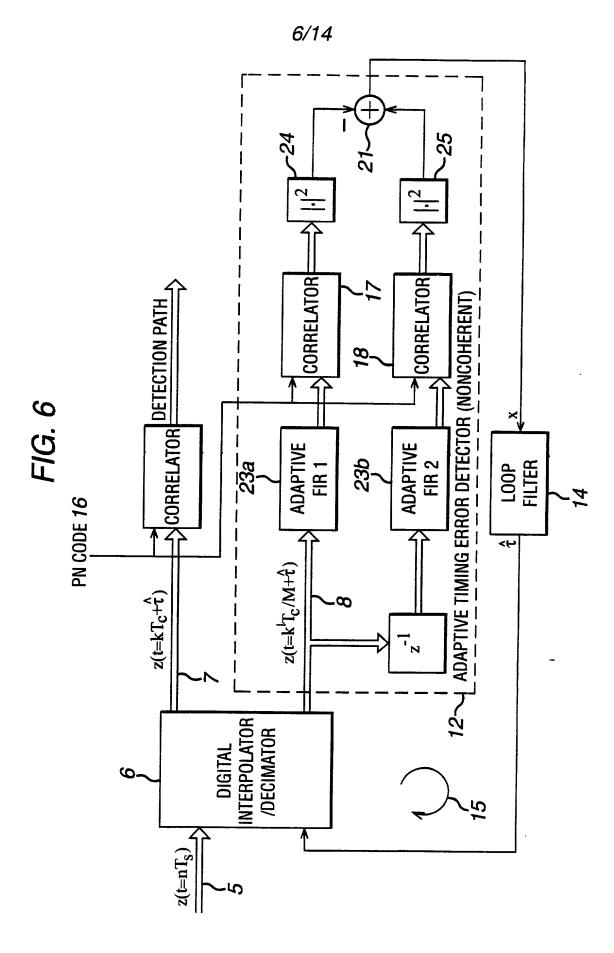
ξ.

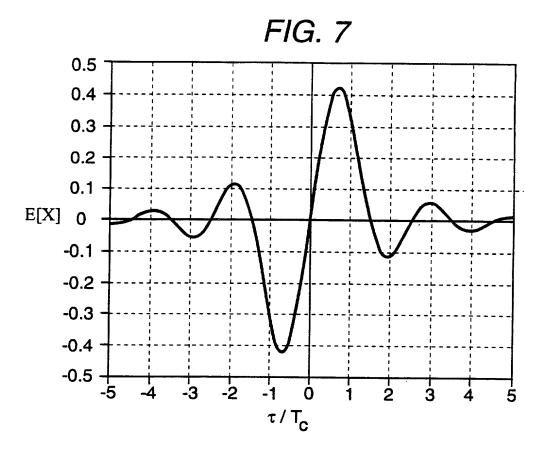


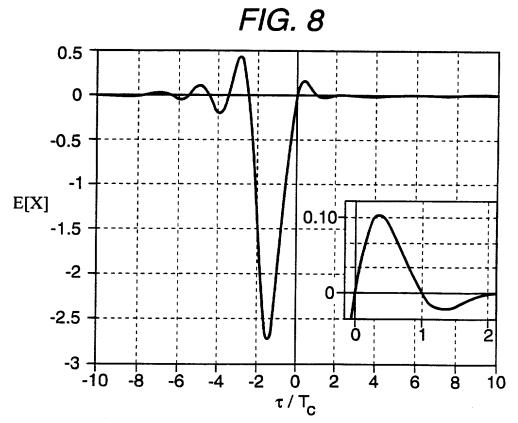
f

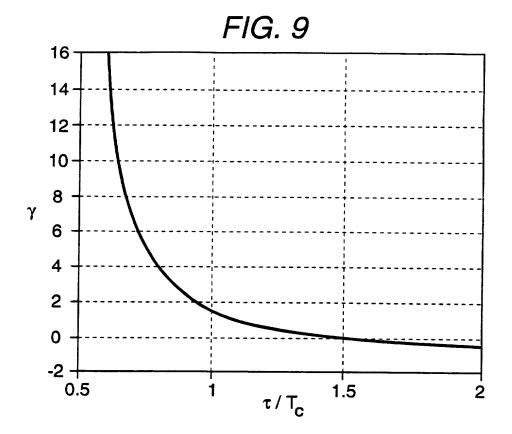


{









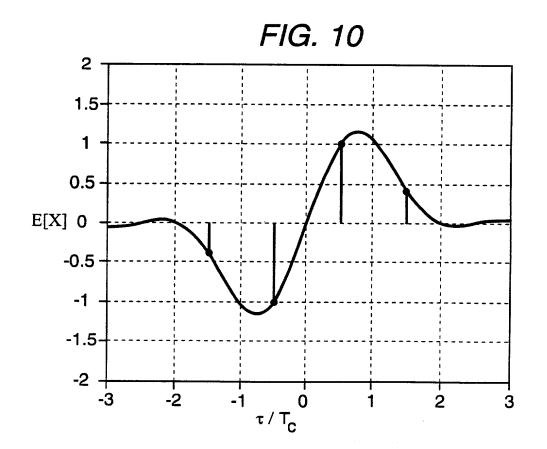
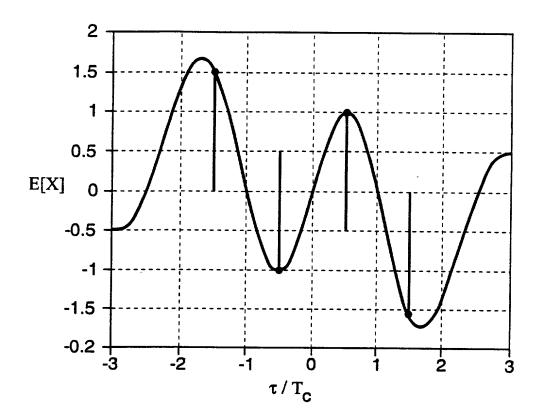


FIG. 11



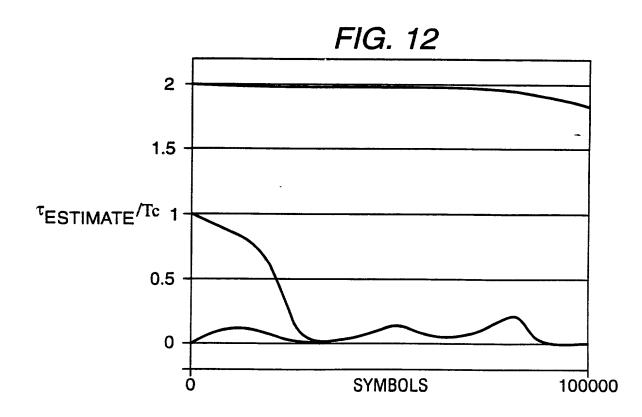


FIG. 13

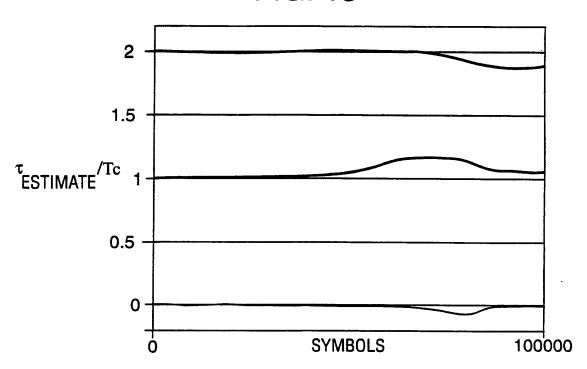


FIG. 14

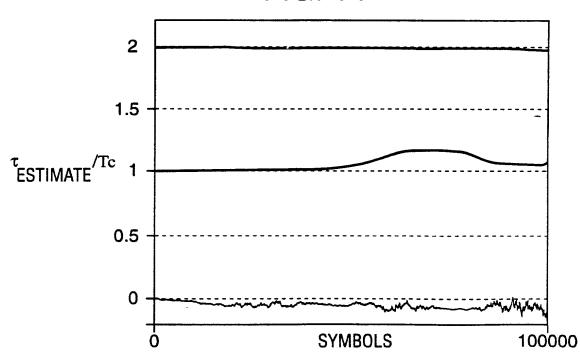
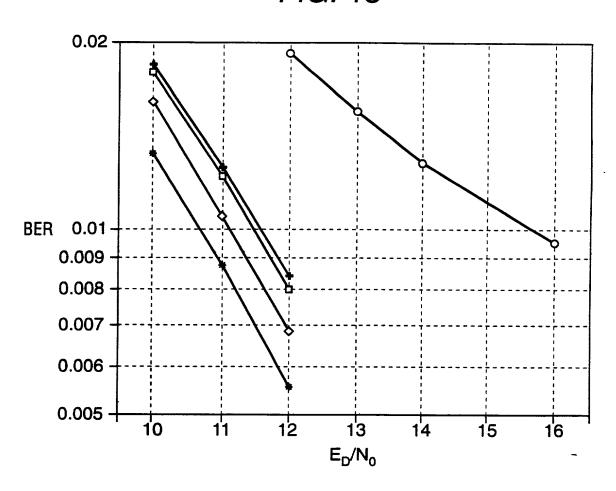


FIG. 15



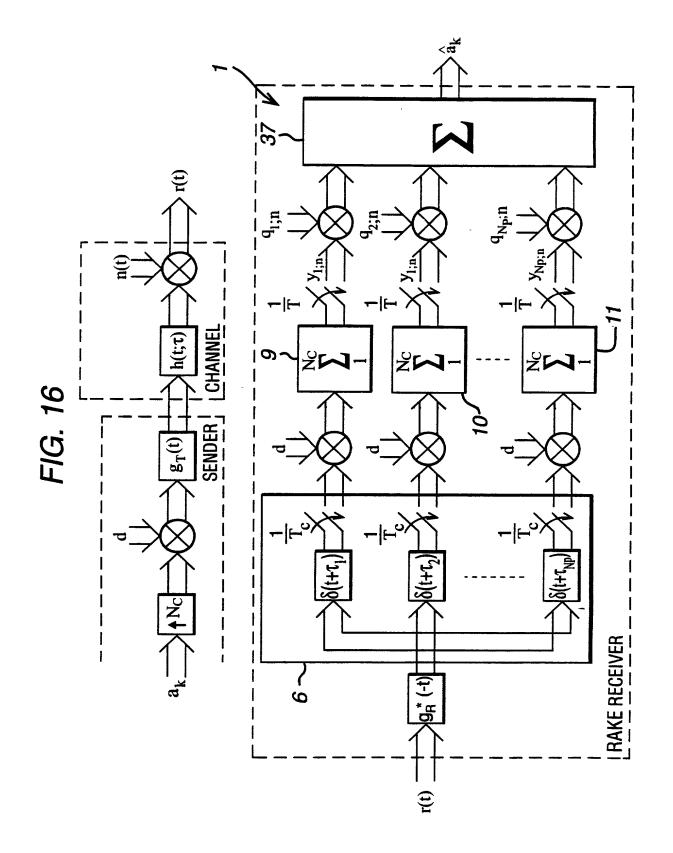
-- PERFECT SYNC

→ LMS KALMAN PHASOR EST., PERFECT TIMING

-- MMSE TIMING

+ SIMPLE TIMING

- CONVENIONAL TED



→ TO DETECTION PATH TED, Z|\rightarrow |Z| LOOP FILTER Z|Z z ~|z 1 FIG. 17 Z 91 p $1/T_{\mathbb{C}}$ $1/T_{\rm c}$ DEMUX $||NTERPOLATOR||^{2/T}c$ z(t = kT/2) θ

13/14

